INDEX OF AUTHORS

ALLEN, T. D. 267
APPLETON, T. C. 319, 339

BARD, J. B. L. 371
BARNES, A. 187
BELTRAME, F. 103
BRAMBILLA, G. 103
BRAMWELL, M. E. 49

CAVAZZA, B. 81, 103
CHURCH, K. 301
CROSSLEY, R. 419

DE SOUZA, W. 287
DICKINSON, H. G. 177
DOHRMANN, U. 161
DONALDSON, D. J. 117

ELLEM, K. A. O. 249
ESHHAR, Z. 149

FISHER, P. R. 161
FORER, A. 1
FRASER, R. S. S. 187

GERSHON, M. D. 439
GOLINSKA, K. 459
GRANT, W. N. 161
GREEN, C. R. 351

HARRIS, H. 49
HOCKADAY, A. 339
HOLBERTON, D. V. 419
HOWARD, L. 27
HUANG, Y. L. 439

KAY, G. F. 249
KENDALL, M. D. 319
KIMBLE, M. 301
KITAMURA, A. 209
KUPSKY, W. J. 439

LANE, N. J. 223

MAHAN, J. T. 117
MARALDI, N. 103
MARGEL, S. 149
MARKS, G. E. 171
MARTINEZ-PALOMO, A. 287
McBRIDE, W. H. 371
MEIRELLES, M. N. L. 287

NAGAI, R. 385
NELSON, W. J. 129
NICHOLSON, J. K. 319
NICOLINI, C. 103
NOIROT, C. 351
NOIROT-TIMOTHÉE, C. 351

OFARIM, M. 149

PARRY, D. 177
PATRONE, E. 81, 103
PIOLI, F. 81, 103
PORTER, E. K. 177

RICCI, E. 81
ROSS, A. R. 371

SAGA, Y. 237
SCHOR, A. M. 267
SCHOR, S. L. 267
SILLERS, P. J. 1
SOUTO-PADRONE, T. 287
SPIEGEL, E. 27
STEERS, E. Jr 209
STEPHEN, J. 339
SWALES, L. S. 223

TAKAGI, S. 385
TAMIR, H. 439
TRAUB, P. 129
TRAUB, U. E. 129
TREFILETTI, V. 81, 103

WARLEY, A. 319, 339
WHITE, M. K. 49
WILLIAMS, K. L. 161
WILLIAMS, N. E. 407

YANAGISAWA, K. 237

INDEX OF SUBJECTS

Action spectrum
for changes in spindle fibre birefringence after u.v. irradiation in spermatocytes: SILLERS & FORER 1
Affinity ligands
conjugated with microsphere beads for cell fractionation: MARGEL, OFARIM & ESHHAR 149
Attachment
of *Paramecium* to polystyrene surfaces: KITAMURA & STEERS 209

Binding glycoprotein
of rat platelets to serotonin: TAMIR, KUPSKY, HUANG & GERSHON 439
Biogenesis
of surface membranes in deciliated *Tetrahymena*: WILLIAMS 407
Birefringence
in single chromosomal spindle fibres, changes after u.v. irradiation: SILLERS & FORER 1

Cadmium nephrotoxicity
in proximal and distal tubules in mouse: KENDALL, WARLEY, NICHOLSON & APPLETON 319
Calcium ions
in regulation of cytoplasmic streaming in *Vallisneria*: TAKAGI & NAGAI 385
Cell cycle
theoretical analysis of macromolecular synthesis: FRASER & BARNES 187
Cell fractionation
with affinity ligands conjugated to microsphere beads: MARGEL, OFARIM & ESHHAR 149
Cell fusion inducing factor
secreted by giant cells of *Dictyostelium*: SAGA & YANAGISAWA 237
Cell junctions
development in sea-urchin embryos: SPIEGEL & HOWARD 27
Cell structure
higher-order, in resting calf thymus cells: CAVAZZA, TREFILETTI, PIOLI, RICCI & PATRONE 81
Chromatin
higher-order structure in resting cells: NICOLINI, CAVAZZA, TREFILETTI, PIOLI, BELTRAME, BRAMBILLA, MARALDI & PATRONE 103
higher-order structure in resting cells: CAVAZZA, TREFILETTI, PIOLI, RICCI & PATRONE 81
Chromosome movement
in crane-fly spermatocytes: SILLERS & FORER 1
Chromosomes
plant, Feulgen banding of heterochromatin in: MARKS 171
Cleavage
in *Drosophila* eggs: KIMBLE & CHURCH 301
Collagenous substrata
in study of culture conditions for epithelial cells: SCHOR, SCHOR & ALLEN 267
Concanavalin A
participation of binding sites in interaction of *Trypanosoma* with macrophages: MEÍRELLES, MARTINEZ-PALOMO, SOUTO-PADRON & DE SOUZA 287
Computer image analysis
of rat liver cell chromatin fibres: NICOLINI, CAVAZZA, TREFILETTI, PIOLI, BELTRAME, BRAMBILLA, MARALDI & PATRONE 103
Conditioned medium
for cultures of human malignant melanoma: ELLEM & KAY 249
Cryo-jet
propane rapid freezing of insect intercellular junctions: SWALES & LANE 223
Cytoplasmic streaming
induction in *Vallisneria* mesophyll: TAKAGI & NAGAI 385

Development
of cell junctions in sea-urchin embryos: SPIEGEL & HOWARD 27
Dictyostelium discoideum
macrocyst development in: SAGA & YANAGISAWA 237
spontaneous turning behaviour: FISHER, GRANT, DOHRMANN & WILLIAMS 161
Drosophila melanogaster
eggs, meiosis and early cleavage: KIMBLE & CHURCH 301

Electron microscopy
of chromatin from calf thymus: CAVAZZA, TREFILETTI, PIOLI, RICCI & PATRONE 81
Elemental analysis
of mouse kidney tubules: KENDALL, WARLEY, NICHOLSON & APPLETON 319

Endothelial cells
effects of culture conditions on: SCHOR, SCHOR & ALLEN 267
Epidermal cells
migration during wound closure: DONALDSON & MAHAN 117
Extracellular coats
hyaluronidase-sensitive, SEM after freeze-drying: BARD, McBRIDE & ROSS 371
Extracellular matrix
in development of cell junctions: SPIEGEL & HOWARD 27

Feulgen banding
of heterochromatin in plant chromosomes: MARKS 171
Fibronectin
as substrate for epidermal cell migration in wound closure: DONALDSON & MAHAN 117
Fibrinogen
as substrate for epidermal cell migration in wound closure: DONALDSON & MAHAN 117
Filaments
2·5 nm, from *Giardia*: CROSSLEY & HOLBERTON 419
Freeze-drying
of hyaluronidase cell coats, SEM: BARD, McBRIDE & ROSS 371
Freeze-etching
of nuclei from rat liver cells: NICOLINI, CAVAZZA, TREFILETTI, PIOLI, BELTRAME, BRAMBILLA, MARALDI & PATRONE 103
Frozen sections
of HeLa S3 cells for microanalysis of elemental levels in cell cycle: WARLEY, STEPHEN, HOCKADAY & APPLETON 339

Gametogenesis
in *Lilium*: PORTER, PARRY & DICKINSON 177
Gap junctions
isolation and characterization in invertebrates: GREEN, NOIROT-TIMOTHÉE & NOIROT 351
Giardia
cytoskeleton proteins, extraction and repolymerization: CROSSLEY & HOLBERTON 419
Giardin
extraction from *Giardia* and repolymerization *in vitro*: CROSSLEY & HOLBERTON 419
Growth assay
in cultured human malignant melanoma: ELLEM & KAY 249

HeLa S3 cells
X-ray microanalysis of elemental levels in cell cycle: WARLEY, STEPHEN, HOCKADAY & APPLETON 339
Heterochromatin
Feulgen banding in plant chromosomes: MARKS 171
Hexose transport
kinetics in malignant/non-malignant hybrids: WHITE, BRAMWELL & HARRIS 49
Hyaluronidase-sensitive cell coats
freeze-fracture and SEM: BARD, McBRIDE & ROSS 371
Hybrid cells
kinetic parameters of hexose transport in malignancy: WHITE, BRAMWELL & HARRIS 49
Hydrophobic reagents
induce attachment of *Paramecium* to polystyrene surfaces: KITAMURA & STEERS 209

Immunoglobulin G
induction of attachment of *Paramecium* to polystyrene surfaces: KITAMURA & STEERS 209
Insect central nervous system
rapid freezing of intercellular junctions: SWALES & LANE 223
Intermediate filament
protein, vimentin, in cultured mammalian cells: TRAUB, NELSON & TRAUB 129

Junction isolation
in invertebrates: GREEN, NOIROT-TIMOTHÉE & NOIROT 351
Junctions
gap, septate and tight, in insects, rapid freezing by cryo-jet: SWALES & LANE 223

Kidney tubules
X-ray microanalysis of proximal and distal: KENDALL, WARLEY, NICHOLSON & APPLETON 319

Lilium
male meiosis, poly(A)$^+$ RNA changes: PORTER, PARRY & DICKINSON 177

Macrocyst development
in *Dictyostelium discoideum*: SAGA & YANAGISAWA 237
Macromolecular synthesis
during cell cycle, theoretical analysis: FRASER & BARNES 187

Macrophages
interaction with *Trypanosoma*, participation of ConA binding sites: MEIRELLES, MARTINEZ-PALOMA, SOUTO-PADRON & DE SOUZA 287
Malignancy
kinetics of hexose transport in hybrids between malignant and non-malignant cells: WHITE, BRAMWELL & HARRIS 49
Mammalian cells
cultured, vimentin, in: TRAUB, NELSON & TRAUB 129
Meiosis
in *Drosophila* eggs: KIMBLE & CHURCH 301
male in *Lilium*, changes in poly(A)$^+$ RNA: PORTER, PARRY & DICKINSON 177
Melanoma
human, nature of conditioning nutrients for culture: ELLEM & KAY 249
Membranes
surface, regeneration in deciliated *Tetrahymena*: WILLIAMS 407
Messenger RNA
in male meiosis in *Lilium*: PORTER, PARRY & DICKINSON 177
Microsphere beads
conjugated with affinity ligands for cell fractionation: MARGEL, OFARIM & ESHHAR 149
Microtubules
in mitosis of crane-fly spermatocytes: SILLERS & FORER 1
Migration
of epidermal cells during wound closure: DONALDSON & MAHAN 117
Mitosis
in crane-fly spermatocytes: SILLERS & FORER 1

Nuclear structure
by freeze-etching of rat liver cells: NICOLINI, CAVAZZA, TREFILETTI, PIOLI, BELTRAME, BRAMBILLA, MARALDI & PATRONE 103
Nutrient concentration
culture of human malignant melanoma: ELLEM & KAY 249

Orientation
of *D. discoideum* slugs: FISHER, GRANT, DOHRMANN & WILLIAMS 161

Paramecium
attachment to polystyrene surfaces: KITAMURA & STEERS 209
Platelets
of rat, serotonin-binding glycoprotein: TAMIR, KUPSKY, HUANG & GERSHON 439
Polystyrene
attachment of *Paramecium*: KITAMURA & STEERS 209
Protein synthesis
in deciliated *Tetrahymena*: WILLIAMS 407
Pyruvate
in growth of human malignant melanoma: ELLEM & KAY 249

Rapid freezing
of insect intercellular junctions by cryo-jet: SWALES & LANE 223

Sea-urchin
embryos, development of cell junctions: SPIEGEL & HOWARD 27
SEM
of hyaluronidase-sensitive cell coats after freeze-fracture: BARD, McBRIDE & ROSS 371
Septate junctions
invertebrate, isolation and characterization: GREEN, NOIROT-TIMOTHÉE & NOIROT 351
Serotonin
-binding glycoprotein of rat platelets: TAMIR, KUPSKY, HUANG & GERSHON 439
Serum dependence
of human malignant cells in culture: ELLEM & KAY 249
Spindle fibres
birefringence changes after u.v. irradiation: SILLERS & FORER 1
Spontaneous behaviour
by *Dictyostelium discoideum*: FISHER, GRANT, DOHRMANN & WILLIAMS 161
Sprouting cells
in bovine aortic endothelium: SCHOR, SCHOR & ALLEN 267
Streaming
cytoplasmic, in *Vallisneria* mesophyll: TAKAGI & NAGAI 385
Synchronized cultures
of HeLa S3 cells, X-ray microanalysis: WARLEY, STEPHEN, HOCKADAY & APPLETON 339

Tetrahymena
surface membrane regeneration: WILLIAMS 407
Tissue-culture conditions
effects on bovine aortic epithelial cells: SCHOR, SCHOR & ALLEN 267
Theoretical analysis
of method for determining pattern of macromolecular synthesis during cell cycle: FRASER & BARNES 187

Trypanosoma cruzi
interaction with macrophages, participation of ConA binding sites: MEIRELLES, MARTINEZ-PALOMO, SOUTO-PADRON & DE SOUZA 287

Tubulin
from *Giardia* cytoskeleton: CROSSLEY & HOLBERTON 419

Ultraviolet light irradiation
of single chromosomal spindle fibres in crane-fly spermatocytes: SILLERS & FORER 1

Vallisneria
mesophyll, cytoplasmic streaming in: TAKAGI & NAGAI 385

Vimentin
in cultured mammalian cells: TRAUB, NELSON & TRAUB 129

X-ray microanalysis
of HeLa S3 cells, elemental levels in cell cycle: WARLEY, STEPHEN, HOCKADAY & APPLETON 39
of tubule cells in mouse kidney: KENDALL, WARLEY, NICHOLSON & APPLETON 319